

Upper Blackwater River, WV Case Study

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The WV Environmental Quality Board (EQB) inappropriately designated a 23.4 mile segment of the Upper Blackwater River as a cold water fishery. This designation has resulted in the development of a total maximum daily load (TMDL) that prohibits future waste load allocations for sewage discharges. The stream use is protected by a state dissolved oxygen (DO) water quality criterion of not less than 7.0mg/l in spawning areas and in no case less than 6.0mg/l at any time. However natural physical, chemical and biological conditions preclude attainment of the standard on a continuous basis. The Blackwater River drains a 7,000 acre boreal wetland in the Canaan Valley, WV, the largest elevated wetland in the eastern U.S. As a result the Blackwater River has water quality characteristics typical of low gradient black water rivers---relatively low DO and high temperatures. While these conditions are not supportive of trout reproduction the WV Division of Natural Resources maintains a put and take trout fishery with periodic stockings.

Subsequent to a 1997 consent order between EPA and certain environmental groups the EPA developed a TMDL for the stream reach. The TMDL concluded that effluent from existing point sources is assimilated in the river and that background natural conditions cause violation of the DO standard. EPA recommended that “interested parties reevaluate the existing water quality criterion for this section of the Blackwater River through a use attainability analysis (UAA) and make modifications, if necessary to the numeric criterion and designated use”. Despite these findings future waste load allocations were prohibited. A UAA was developed by the Blackwater Watershed Association but was rejected by the EQB. In a legal challenge to the TMDL the EQB found that the TMDL was technically flawed but that the Board did not have authority to overturn it. Upon appeal to Circuit Court DEP was ordered to revise the TMDL and to refrain from listing the Upper Blackwater on future lists of impaired streams. Presently, the lower court ruling has been stayed and awaits a ruling from the WV Supreme Court.

Significant resources have been wasted by parties on both sides of this issue due to the improper use classification of the Blackwater River. As the TMDL program progresses similar situations will likely develop in other watersheds whereby resources will be wasted in a vain attempt to achieve designated “uses” that will never be attained.

This presentation will support the development of clear, technically based guidance for the states to use to definitively determine proper use designations and for conducting use attainability analyses. This guidance should include the type, quantity and quality of physical, chemical and biological water quality data on which use designations should be based, criteria for various use categories, how to define natural background conditions, and application of proper water quality criteria for specific use protection.